



INSTITUTE OF AERONAUTICAL ENGINEERING (Autonomous)

Dundigal, Hyderabad - 500 043

ELECTRICAL AND ELECTRONICS ENGINEERING

COURSE DESCRIPTION FORM

Course Title	MANAGERIAL ECONOMICS AND FINANCIAL ANALYSIS			
Course Code	A40010			
Regulation	R13 - JNTUH			
Course Structure	Lectures	Tutorials	Practicals	Credits
	4	-	-	4
Course Coordinator	M.RAMESH, Assistant Professor, MBA Department.			
Team of Instructors	M.Ramesh, Assisatnt Professor, MBA Department.			

I. COURSE OVERVIEW:

Course is designed in such a way that it gives an overview of concepts of Economics. Managerial Economics enables students to understand micro environment in which markets operate how price determination is done under different kinds of competitions. Financial Analysis gives clear idea about concepts, conventions and accounting procedures along with introducing students to fundamentals of ratio analysis and interpretation of financial statements. Break Even Analysis is very helpful to the Business Concern for Decision Making, controlling and forward Strategic Planning. Ratio analysis gives an idea about financial forecasting, financial planning, controlling the business and decision making.

II. PREREQUISITE(S):

Level	Credits	Periods/ Week	Prerequisites
UG	4	4	Managerial Economics and Financial Analysis

III. MARKS DISTRIBUTION:

Sessional Marks	University End Exam marks	Total marks
<p>There shall be 2 midterm examinations. Each midterm examination consists of one objective paper, one subjective paper and one assignment. The objective paper is for 10 marks and subjective paper is for 10 marks, with duration of 1 hour 20 minutes (20 minutes for objective and 60 minutes for subjective paper). Objective paper is set for 20 bits of – multiple choice questions, fill-in the blanks, 10 marks. Subjective paper contains of 4 full questions (one from each unit) of which, the student has to answer 2 questions, each question carrying 5 marks.</p> <p>First midterm examination shall be conducted for 1-4 units of syllabus and second midterm examination shall be conducted for 5-8 units. 5 marks are allocated for Assignments (as specified by the concerned subject teacher) – first Assignment should be submitted before the conduct of the first mid, and the second Assignment should be submitted before the conduct of the second mid. The total marks secured by the student in each midterm examination are evaluated for 25 marks, and the average of the two midterm examinations shall be taken as the final marks secured by each candidate</p>	75	100

IV. EVALUATION SCHEME:

S. No	Component	Duration	Marks
1.	I Mid Examination	80 minutes	20
2.	I Assignment	-	5
3.	II Mid Examination	80 minutes	20
4.	II Assignment	-	5
5.	External Examination	3 hours	75

V. COURSE OBJECTIVES:

At the end of the course, the students will be able to:

- I. To enable the student to analyze and understanding the concepts of Managerial Economics, Demand Analysis, Elasticity of Demand and Demand Forecasting. .
- II. To provide the student with an understanding of the production theories, analysis and cost analysis while dealing with the production and factors of production.
- III. To provide the student with an understanding of different market structures and price and output determination in different market structures.
- IV. To give the student an understanding the features and evaluation of different forms of Business Organizations, New Economic Environment, significance of Capital and capital budgeting methods.
- V. To enable the student to analyze and understanding the significance of financial analysis through Ratio Analysis for Decision making, Financial forecasting, planning, controlling the business and acquiring the knowledge on financial accounting and management accounting

VI. COURSE OUTCOMES:

After completing this course the student must demonstrate the knowledge and ability to:

1. Understand the Managerial Economics deals with the economic activities performed by the businessmen
2. It deals with the significance of demand, its analysis, measurement of demand and its forecasting
3. It explains the production function through the Cobb Douglas Production Function.
4. It introduces to the different structures of market covering how price is determined under different market structures.
5. Different forms of business organizations existing in the modern business can be very well understood under its scope.
6. The allocation of capital which plays a vital role in a business organization is learnt.
7. The double entry book keeping will give an exposure to the maintenance of books of records and allocation of profits in an enterprise.

VII. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program outcomes		Level	Proficiency assessed by
PO1	General knowledge: An ability to apply the knowledge of mathematics, science and Engineering for solving multifaceted issues of Electrical Engineering	H	Assignments
PO2	Problem Analysis: An ability to communicate effectively and to prepare formal technical plans leading to solutions and detailed reports for electrical systems	S	Exercise
PO3	Design/Development of solutions: To develop Broad theoretical knowledge in Electrical Engineering and learn the methods of applying them to identify, formulate and solve practical problems involving	H	Assignments, discussion

	electrical power		
PO4	Conduct investigations of complex problems: An ability to apply the techniques of using appropriate technologies to investigate, analyze, design, simulate and/or fabricate/commission complete systems involving generation, transmission and distribution of electrical energy	S	Exercise
PO5	Modern tool usage: An ability to model real life problems using different hardware and software platforms, both offline and real-time with the help of various tools along with upgraded versions.	N	-----
PO6	The engineer and society: An Ability to design and fabricate modules, control systems and relevant processes to meet desired performance needs, within realistic constraints for social needs	S	Exercise
PO7	Environment and sustainability: An ability To estimate the feasibility, applicability, optimality and future scope of power networks and apparatus for design of eco-friendly with sustainability	H	Discussion, Seminars
PO8	Ethics: ToPossess an appreciation of professional, societal, environmental and ethical issues and proper use of renewable resources	N	-----
PO9	Individual and team work: An Ability to design schemes involving signal sensing and processing leading to decision making for real time electrical engineering systems and processes at individual and team levels	S	Discussions
PO10	Communication: an Ability to work in a team and comprehend his/her scope of work, deliverables , issues and be able to communicate both in verbal ,written for effective technical presentation	S	Discussion, Seminars
PO11	Life-long learning: An ability to align with and upgrade to higher learning and research activities along with engaging in life-long learning.	S	Discussions, Seminars
PO12	Project management and finance: To be familiar with project management problems and basic financial principles for a multi-disciplinary work	S	

N= None

S=Supportive

H=highly related

III. HOW PROGRAM SPECIFIC OUTCOMES ARE ASSESSED:

Program Specific Outcomes		Level	Proficiency assessed by
PSO1	Professional Skills: Able to apply the knowledge of electrical circuit analysis, electro-magnetic fields, using the testing, measuring electrical devices to solve multi-faceted problems of power system.	N	Assignments
PSO2	Problem-Solving Skills: An ability to construct, operate, analyze, investigate, control, monitor and rectify the real situation problems in power stations, electrical machines, conversion circuits, controlling devices and transmission lines	N	
PSO3	Successful Career and Entrepreneurship: An Ability to explore new cutting edge technologies to develop innovative projects, there by contributing to the nation both as a good entrepreneur and responsible citizen.	N	

N - None

S - Supportive

H- Highly Related

IX. SYLLABUS:

UNIT - I

Introduction & Demand Analysis:

Introduction to Managerial Economics: Definition, Nature and Scope of Managerial Economics – Demand Analysis: Demand Determinants, Law of Demand and its exceptions.

Elasticity of Demand: Definition, Types, Measurement and Significance of Elasticity of Demand. Demand Forecasting, Factors governing demand forecasting, methods of demand forecasting

UNIT - II

Production & Cost Analysis:

Theory of Production and Cost Analysis: Production Function – Iso-quants and Iso-costs, MRTS, Least Cost Combination of Inputs, Cobb-Douglas Production function, Laws of Returns, Internal and External Economies of Scale.

Cost Analysis: Cost concepts, Opportunity cost, Fixed vs. Variable costs, Explicit costs vs. Implicit costs, out of pocket costs vs. Imputed costs, Break-even analysis, Determination of Break – Even point (Simple Problems) , Managerial Significance of BEA.

UNIT - III

Markets & New Economic Environment:

Market structures: Types of competition, Features of perfect competition, Monopoly and monopolistic competition.

Price determination & Price Statistics: Price Output determination in case of perfect competition and monopoly. Pricing objectives and policies of pricing, Methods of pricing.

Business & New Economic Environment

Business features and evaluation of different forms of Business organization: Sole proprietorship, partnership, Joint Stock Company, public enterprises and their types, New Economic Environment: changing business environment in post-liberalization scenario.

UNIT - IV

Capital and its significance, types of capital, estimation of fixed and working capital requirements, methods and sources of raising capital- Trading Forecast, Capital budget, Cash Budget. Features of capital budgeting proposals, methods of capital budgeting – payback method, Accounting rate of return (ARR), Net Present Value Method (simple problems).

UNIT – V

Introduction to Financial Accounting and Financial Analysis: Accounting Concepts and Conventions, Introduction to IFRS– Double – Entry Book keeping, Journal, Ledger, Trial balance, Final accounts (Trading Account, Profit and Loss Account and Balance Sheet with simple adjustments.)

Financial Analysis through Ratios: Significance, limitations of Ratio Analysis and Ratios Computation, Analysis and Interpretation of Liquidity Ratios (Current Ratio and quick ratio). Activity Ratios (Inventory turnover ratio and Debtor Turnover ratio), Capital structure Ratios (Debt-Equity ratio, Interest Coverage ratio) and profitability ratios (Gross profit Ratio, Net profit ratio, Operating Ratio, P/E Ratio and EPS), Du Pont Chart..

Text books:

1. A.R. Aryasri (2007) Managerial Economics and Financial Analysis, 3rd Ed, TMH.

References:

1. Managerial Economics, Dwivedi, 5th Ed, Vikas Publication House Pvt.Ltd.
2. Financial Accounting, S.N. Maheshwari & S.K.Maheshwari, 4th Ed, Vikas Publication House Pvt.Ltd.
3. Financial Accounting, R.Narayana Swamy, Third Ed, PHI
4. J.V.Prabhakar Rao & P.V.Rao, Managerial Economics & Financial Analysis, Maruthi Publishers, 2011.

X. COURSE PLAN:

At the end of the course, the students are able to achieve the following course learning outcomes:

Lecture No.	Topics to be covered	Course Learning Outcomes	References
1-2	Able to Explain about managerial economics according to the business	Introduction to Managerial Economics: Definition, Nature and Scope of Managerial Economics.	T1: 1.3-1.8)
3-4	Able to Describe about demand analysis, the Law of Demand and Demand Function.	Demand Analysis: Demand Determinants of Demand, Definitions, assumptions and exceptions of Law of Demand and Demand Function.	T1: 2.2-2.11)
5-8	Able to Understand elasticity of the demand of the product, different types, Measurement of Elasticity of Demand and Factors influencing on Elasticity of Demand.	Definitions, Significance of Elasticity of Demand, Types and Measurement of Elasticity of Demand and Factors influencing Elasticity of Demand.	T1: 3.3-3.20)
9-11	Able to Discuss different methods of Demand Forecasting and the factors governing Demand Forecasting.	Methods of demand forecasting and Factors Governing Demand Forecasting.	T1: 4.6-4.19)
12-16	Able to Understand the Production function, features of Iso-Quants and Iso-Costs, different types of Internal Economies, External Economies and Law of Returns with appropriate examples	Production function, features of Iso-Quants, Iso-Costs, MRTS, Least Cost Combination of Inputs and Cobb-Douglas Production Function, Different types of Internal Economies, External Economies and Law of Returns.	T1(5.3-5.18)
17	Able to Classify different types of costs	Cost concepts, fixed vs Variable costs, explicit vs implicit costs, out of pocket costs vs Imputed costs.	T1(5.29-6.8)
18	Able to Identify the Significance and Limitations of Break-Even Analysis	Break-even Analysis (BEA). Managerial Significance of BEA.	T1(7.13-7.14)
19-21	Able to Calculate the Break-Even Point (Simple Problems)	Determination of Break-Even Point (Simple Problems)	T17.1-7.12)
22-26	Able to Examine the features, price-	Market structures: Types of	T1(8.4-8.16)

	output determination under Perfect Competition, Monopoly and Monopolistic competition Markets.	competition, Features of Perfect Competition, Monopoly and Monopolistic competition Markets and determination of price –output under Perfect Competition, Monopoly and Monopolistic competition markets.	
27-30	Able to Discuss the Objectives, Policies and Methods of Pricing Strategies and Price Methods.	Objectives and Policies of Pricing- Methods of Pricing: Cost Plus Pricing, Marginal Cost Pricing, Sealed Bid Pricing, Going Rate Pricing, Limit Pricing Market Skimming Pricing, Penetration Pricing, Two-Part Pricing, Block Pricing, Bundling Pricing, Peak Load Pricing, Cross Subsidization	T18.21-8.25)
31-35	Able to Describe Features of business, Definitions of Various forms of Business Units.	Characteristic features of Business, Definitions, Features, Merits and Demerits of Sole Proprietorship, Partnership, Joint Stock Company.	T1(9.3-9.15)
36-38	Able to Predict the Merits & Demerits of Different types of Public Enterprises and Changing Business Environment to Post Liberalization Scenario.	Definitions, Features, Merits and Demerits of Public Enterprises and their types and Changing Business Environment in Post-liberalization scenario	T1(9.26-10.23)
39-41	Able to Explain the significance and classification of capital, Methods and Sources of Raising Finance.	Capital and its significance, Types of Capital, Working capital requirements, Methods and sources of rising finance, Trading Forecast, Capital Budget and Cash Budget.	T11(1.3-11.15)
42-45	Able to Enumerate the concept of capital budgeting and allocations of the resources through capital budgeting methods and compute simple problems.	Nature and Significance of capital budgeting, Methods of Capital Budgeting (PBP, ARR, IRR, NPV.PI) Simple Problems.	T112.1-12.26)
46-49	Able to Illustrate the Significance of Financial Accounting, Double Entry, Accounts, Accounting Concepts and Conventions	Significance of Financial Accounting and Accounting Terminology and Accounting Cycle.	T1(13.4-13.15)
50-58	Able to Examine the meaning, advantages and Limitations of the Journal, Ledger and Trial Balance and Final Accounts and Solve simple Problems.	Meaning, Advantages and Limitations of the Journal, Ledger and Trial Balance and Final Accounts and Simple Problems from Journal, Ledger, Trail Balance and Final Accounts with simple adjustments.	T1(13.15-13.68)

59	Able to Describe Meaning, Definitions and Limitations of Ratio Analysis	Meaning, Definitions and Limitations of Ratio Analysis.	T1(14.18)
60-65	Able to Compute different types of Financial Ratios	Computation, Analysis and Interpretation of Liquidity Ratios, Activity Ratios, Leverage Ratios and Profitability Ratios.	T1(14.4-14.18)

XI. MAPPING COURSE OBJECTIVES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:

Course Objectives	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
I	S	H	S		H	S	H	H	H	S	S		H		S
II	S	H	S		H	S	S	S	S	S		S	H	S	
III		H	S	S	H			S	H		S		H	S	
IV	S	H	S	S	H	S	S	H	S	S		S	S	H	
V	S	H			H	S	S	H	S	S	S		S	H	S
VI						H									S

S – Supportive

H - Highly Related

XII. MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:

Course Outcomes	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
1	S	H	S	S		H	H	S				S	H		S
2					S	S		H	S		S	S			
3	S	H	S	S			H	S		S		S	H		
4			S		H	S			S	S				S	
5		H						H			S	S	S	H	
6	S		S		H	S	S		S	S		S			
7	S	H	S	S	H		S	H	S			S	H		
8						H		S				S		H	S
9					S		H						H	H	S

S – Supportive

H - Highly Related